

CHAPTER 7 IN THE BOOK:

## **JELLYFISH: ECOLOGY, DISTRIBUTION PATTERNS AND HUMAN INTERACTIONS**

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## **JELLYFISH BLOOMING IN MALTESE WATERS AND ITS SOCIO-ECONOMIC INTERACTIONS**

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### **ABSTRACT**

Marine and aerial surveys in the central Mediterranean around the Maltese Islands, have allowed for an extensive field study of the blooming episodes of gelatinous species, which include jellyfish, comb jellies and sea salps. These surveys investigated the extent of blooming, from coast to offshore, with respective size distribution and associated environmental conditions. Though various species of gelatinous organisms have been recorded in these waters only few species have to-date grown in population size to form large blooms. The latter species comprising: *Pelagia noctiluca*, *Cotylorhiza tuberculata*, *Velella velella*, *Leucothea multicornis* and various sea salp species, which have been found to bloom in both coastal and offshore areas while *Carybdea marsupialis* has been found to bloom in sheltered marinas and harbour areas. The socio-economic impacts of jellyfish blooming were also assessed through interview questionnaire studies with fishermen and various other sea-users. This paper presents the results of these various research aspects, reflecting the respective jellyfish species links with the marine environment and human interactions in this central region of the Mediterranean. Additional ongoing research on the genetics of juvenile fish species associated with blooming jellyfish is also presented.

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